

# Aluminum Sheet, Plate, and Foil Manufacturing: 2002

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## 2002 Economic Census

*Manufacturing*

Industry Series



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U.S. Department of Commerce  
Economics and Statistics Administration  
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## CONTENTS

Introduction to the Economic Census .....	v
Manufacturing .....	ix

### Tables

1. Historical Statistics for the Industry: 2002 and Earlier Years ...	1
2. Industry Statistics for Selected States: 2002 .....	2
3. Detailed Statistics by Industry: 2002 .....	3
4. Industry Statistics by Employment Size: 2002.....	4
5. Industry Statistics by Primary Product Class Specialization: 2002 .....	5
6a. Products Statistics: 2002 and 1997 .....	6
6b. Product Class Shipments for Selected States: 2002 and 1997 .	7
7. Materials Consumed by Kind: 2002 and 1997.....	8

### Appendixes

A. Explanation of Terms .....	A-1
B. NAICS Codes, Titles, and Descriptions .....	B-1
C. Methodology .....	C-1
D. Geographic Notes .....	--
E. Metropolitan and Micropolitan Statistical Areas .....	--
F. Comparability of Product Classes and Product Codes: 2002 to 1997 .....	F-1

-- Not applicable for this report.

**Table 1. Historical Statistics for the Industry: 2002 and Earlier Years**

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year <sup>1</sup>	Com- panies <sup>2</sup>	All estab- lish- ments <sup>3</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)	
			Number <sup>4</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)					
331315, Aluminum sheet, plate, and foil manufacturing .....	2002...	79	104	19 378	1 011 305	14 361	31 299	698 457	3 331 484	7 964 366	11 152 418	'294 753
	2001...	N	N	20 208	978 491	15 373	32 032	673 793	2 713 158	8 614 793	11 518 514	575 406
	2000...	N	N	21 556	1 050 856	16 554	34 608	735 805	3 207 594	9 592 467	12 817 393	346 904
	1999...	N	N	22 332	1 072 817	17 162	36 615	745 351	5 251 638	7 642 456	12 814 130	326 050
	1998...	N	N	23 416	1 083 592	17 831	38 522	736 990	4 459 105	8 498 568	13 054 353	317 521
	1997...	41	69	24 709	1 175 506	19 015	41 140	818 202	3 546 870	10 076 298	13 708 307	331 444

<sup>1</sup>Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

<sup>2</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>3</sup>Includes establishments with payroll at any time during the year.

<sup>4</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 2. Industry Statistics for Selected States: 2002**

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)				
<b>331315, Aluminum sheet, plate, and foil manufacturing</b>												
United States .....	—	104	63	19 378	1 011 305	14 361	31 299	698 457	3 331 484	7 964 366	11 152 418	'294 753
Arkansas .....	5	4	3	432	19 596	308	627	13 040	67 214	105 293	178 074	'2 272
California .....	1	10	4	373	13 787	300	650	9 464	57 707	95 061	151 247	'1 651
Illinois .....	2	7	3	331	15 671	258	531	11 519	44 827	195 563	277 057	'2 292
Indiana .....	—	5	4	1 856	110 525	1 390	3 316	75 662	429 276	797 101	1 183 552	'49 454
Kentucky .....	—	8	7	2 944	150 815	2 150	4 696	103 073	576 680	595 573	1 153 933	'30 439
Virginia .....	—	4	3	883	38 854	732	1 741	30 921	127 153	380 255	505 873	'3 221
West Virginia .....	—	4	4	1 524	70 652	1 125	2 246	43 474	222 350	573 616	780 599	'22 591

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

**Table 3. Detailed Statistics by Industry: 2002**

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
<b>331315, Aluminum sheet, plate, and foil manufacturing</b>	
Companies <sup>1</sup> .....	number.. 79
All establishments <sup>2</sup> .....	number.. 104
Establishments with 1 to 19 employees .....	number.. 41
Establishments with 20 to 99 employees .....	number.. 22
Establishments with 100 employees or more .....	number.. 41
All employees <sup>3</sup> .....	number.. 19 378
Total compensation .....	\$1,000.. 1 393 363
Annual payroll .....	\$1,000.. 1 011 305
Total fringe benefits .....	\$1,000.. 382 058
Production workers, average for year .....	number.. 14 361
Production workers on March 12 .....	number.. 14 398
Production workers on May 12 .....	number.. 14 378
Production workers on August 12 .....	number.. 14 451
Production workers on November 12 .....	number.. 14 200
Production worker hours .....	1,000.. 31 299
Production worker wages .....	\$1,000.. 698 457
Total cost of materials .....	\$1,000.. 7 964 366
Materials, parts, containers, packaging, etc., used .....	\$1,000.. 7 071 317
Resales .....	\$1,000.. 346 447
Purchased fuels .....	\$1,000.. 205 772
Purchased electricity .....	\$1,000.. 149 814
Contract work .....	\$1,000.. 191 016
Quantity of electricity purchased for heat and power .....	1,000 kWh.. 4 066 528
Quantity of electricity generated less sold for heat and power .....	1,000 kWh.. -
Total value of shipments .....	\$1,000.. 11 152 418
Primary products value of shipments .....	\$1,000.. 9 811 770
Secondary products value of shipments .....	\$1,000.. 281 962
Total miscellaneous receipts .....	\$1,000.. 1 058 686
Value of resales .....	\$1,000.. 325 123
Contract receipts .....	\$1,000.. 525 358
Other miscellaneous receipts .....	\$1,000.. 208 205
Primary products specialization ratio .....	percent.. 97
Value of primary products shipments made in all industries .....	\$1,000.. 9 968 026
Value of primary products shipments made in this industry .....	\$1,000.. 9 811 770
Value of primary products shipments made in other industries .....	\$1,000.. 156 256
Coverage ratio .....	percent.. 98
Value added .....	\$1,000.. 3 331 484
Total inventories, beginning of year .....	\$1,000.. 1 382 476
Finished goods inventories .....	\$1,000.. 297 015
Work-in-process inventories .....	\$1,000.. 437 141
Materials and supplies inventories .....	\$1,000.. 648 320
Total inventories, end of year .....	\$1,000.. 1 277 331
Finished goods inventories .....	\$1,000.. 335 649
Work-in-process inventories .....	\$1,000.. 541 939
Materials and supplies inventories .....	\$1,000.. 399 743
Gross value of depreciable assets (acquisition costs) at beginning of year .....	\$1,000.. '6 750 560
Total capital expenditures (new and used) .....	\$1,000.. '294 753
Buildings and other structures (new and used) .....	\$1,000.. '19 505
Machinery and equipment (new and used) .....	\$1,000.. '275 248
Automobiles, trucks, etc., for highway use .....	\$1,000.. '2 856
Computers and peripheral data processing equipment .....	\$1,000.. '78 683
All other expenditures for machinery and equipment .....	\$1,000.. '193 709
Total retirements .....	\$1,000.. '194 014
Gross value of depreciable assets at end of year .....	\$1,000.. '6 851 299
Depreciation charges during year .....	\$1,000.. '349 406
Total rental payments .....	\$1,000.. 44 160
Buildings and other structures .....	\$1,000.. 20 141
Machinery and equipment .....	\$1,000.. 24 019
Total other expenses <sup>4</sup> .....	\$1,000.. 443 672
Response coverage ratio <sup>5</sup> .....	percent.. 93
Repair and maintenance services of buildings and/or machinery <sup>4</sup> .....	\$1,000.. 143 863
Communications services <sup>4</sup> .....	\$1,000.. 7 006
Legal services <sup>4</sup> .....	\$1,000.. 4 817
Accounting, auditing, and bookkeeping services <sup>4</sup> .....	\$1,000.. 1 988
Advertising and promotional services <sup>4</sup> .....	\$1,000.. 2 984
Expensed computer hardware and supplies and purchased computer services <sup>4</sup> .....	\$1,000.. 8 645
Refuse removal (including hazardous waste) services <sup>4</sup> .....	\$1,000.. 10 265
Management consulting and administrative services <sup>4</sup> .....	\$1,000.. 15 961
Taxes and license fees <sup>4</sup> .....	\$1,000.. 27 699
All other expenses <sup>4</sup> .....	\$1,000.. 220 445

<sup>1</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

<sup>4</sup>Based on 2002 Annual Survey of Manufactures (ASM) sample data.

<sup>5</sup>A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 4. Industry Statistics by Employment Size: 2002**

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E <sup>1</sup>	All establishments <sup>2</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)				
331315, Aluminum sheet, plate, and foil manufacturing											
All establishments .....	—	104	19 378	1 011 305	14 361	31 299	698 457	3 331 484	7 964 366	11 152 418	'294 753
Establishments with—											
1 to 4 employees .....	9	20	41	1 624	28	52	1 127	4 226	11 432	15 658	'272
5 to 9 employees .....	8	9	67	2 960	49	93	2 136	7 559	18 712	26 294	'440
10 to 19 employees .....	7	12	168	7 305	117	230	4 804	22 295	33 618	56 165	'1 346
20 to 49 employees .....	—	14	472	17 378	332	723	9 858	77 964	98 322	175 759	'2 437
50 to 99 employees .....	3	8	656	26 668	440	898	16 745	36 461	88 625	161 285	'3 456
100 to 249 employees .....	—	24	3 667	167 141	2 703	5 876	110 706	569 224	1 989 005	2 589 771	'30 432
250 to 499 employees .....	—	4	1 276	63 364	944	2 084	42 607	262 664	566 116	803 437	31 276
500 to 999 employees .....	—	8	6 087	320 656	4 633	10 148	225 389	1 050 990	2 570 832	3 609 761	'55 648
1,000 to 2,499 employees .....	—	5	6 944	404 209	5 115	11 195	285 085	1 300 101	2 587 704	3 714 288	169 446
2,500 employees or more .....	—	—	—	—	—	—	—	—	—	—	—
Administrative records <sup>4</sup> .....	9	29	129	5 907	95	184	4 173	15 586	41 368	56 954	'1 106

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

<sup>4</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 5. Industry Statistics by Primary Product Class Specialization: 2002**

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments <sup>1</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number <sup>2</sup>	Payroll (\$1,000)	Number <sup>2</sup>	Hours (1,000)	Wages (\$1,000)				
331315	Aluminum sheet, plate, and foil manufacturing .....	104	19 378	1 011 305	14 361	31 299	698 457	3 331 484	7 964 366	11 152 418	'294 753
3313151	Aluminum plate (thickness of 0.25 in. or more), including continuous cast .....	4	222	8 578	136	255	4 756	28 794	26 059	54 199	D
3313153	Aluminum sheet and strip, including continuous cast .....	45	16 152	862 473	11 948	25 961	598 094	2 815 847	7 305 477	9 976 816	'271 939
3313155	Plain aluminum foil (less than .006 in. thick) .....	4	1 147	54 346	955	2 221	41 615	207 831	472 679	680 841	D
3313157	Aluminum welded tube .....	13	624	21 722	416	893	12 513	60 106	40 739	101 297	'1 481

<sup>1</sup>Includes establishments with payroll at any time during the year.

<sup>2</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 6a. Products Statistics: 2002 and 1997**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
331315	Aluminum sheet, plate, and foil manufacturing .....	2002.. N 1997.. N	X X	X X	9 968 026 12 483 031
3313151	Aluminum plate (thickness of 0.25 in. or more), including continuous cast .....	2002.. N 1997.. N	X X	X X	589 429 923 131
33131511	Aluminum plate (thickness of 0.25 in. or more), including continuous cast .....	2002.. N 1997.. N	X X	X X	589 429 923 131
3313151101	Heat-treatable aluminum plate (thickness of 0.25 in. or more), including continuous cast .....	1,000 s tons. 2002.. 6 1997.. 11	X X	D 133.2	D 607 656
3313151106	Nonheat-treatable aluminum plate (thickness of 0.25 in. or more), including continuous cast .....	1,000 s tons. 2002.. 5 1997.. 8	X X	D 124.4	D 315 475
3313151Y	Aluminum plate (thickness of 0.25 in. or more), including continuous cast, nsk .....	2002.. N 1997.. N	X X	X X	— —
3313151YWV	Aluminum plate (thickness of 0.25 in. or more), including continuous cast, nsk .....	2002.. N 1997.. N	X X	X X	— —
3313153	Aluminum sheet and strip, including continuous cast .....	2002.. N 1997.. N	X X	X X	8 402 531 10 514 924
33131531	Flat aluminum sheet and strip, including continuous cast .....	2002.. N 1997.. N	X X	X X	900 352 829 245
3313153101	Flat, heat-treatable aluminum sheet and strip, including continuous cast .....	1,000 s tons. 2002.. 8 1997.. 12	X X	S 66.2	270 668 289 768
3313153106	Flat, nonheat-treatable, bare and precoated aluminum sheet and strip, including continuous cast .....	1,000 s tons. 2002.. 8 1997.. 9	X X	S 275.3	629 684 539 477
33131532	Coiled aluminum sheet and strip, including continuous cast .....	2002.. N 1997.. N	X X	X X	7 501 264 9 685 679
3313153211	Coiled, heat-treatable aluminum sheet and strip, including continuous cast .....	1,000 s tons. 2002.. 14 1997.. 11	498.6 774.9	P538.9 773.6	864 934 1 514 023
3313153216	Coiled, nonheat-treatable, bare aluminum sheet and strip, including continuous cast .....	1,000 s tons. 2002.. 14 1997.. 20	3 087.0 P3 132.0	S 2 848.0	5 562 359 5 814 280
3313153221	Coiled, nonheat-treatable, precoated, including only permanent finishes such as enameling and vinyl coatings aluminum sheet and strip, including continuous cast .....	1,000 s tons. 2002.. 10 1997.. 18	X X	9666.8 P1 061.0	1 073 971 2 357 376
3313153Y	Aluminum sheet and strip, including continuous cast, nsk .....	2002.. N 1997.. N	X X	X X	915 —
3313153YWV	Aluminum sheet and strip, including continuous cast, nsk .....	2002.. N 1997.. N	X X	X X	915 —
3313155	Plain aluminum foil (less than .006 in. thick) .....	2002.. N 1997.. N	X X	X X	788 518 1 044 976
33131551	Plain aluminum foil (less than .006 in. thick) .....	2002.. N 1997.. N	X X	X X	788 518 1 044 976
3313155100	Plain aluminum foil (less than .006 in. thick) .....	1,000 s tons. 2002.. 8 1997.. 13	275.0 506.0	S 508.7	788 518 1 044 976
3313157	Aluminum welded tube .....	2002.. N 1997.. N	X X	X X	106 195 N
33131571	Aluminum welded tube .....	2002.. N 1997.. N	X X	X X	106 195 N
3313157100	Aluminum welded tube .....	1,000 s tons. 2002.. 23 1997.. N	X X	S N	106 195 N
331315W	Aluminum sheet, plate, and foil manufacturing, nsk, total .....	2002.. N 1997.. N	X X	X X	81 353 —
331315WY	Aluminum sheet, plate, and foil manufacturing, nsk, total .....	2002.. N 1997.. N	X X	X X	81 353 —
331315WYWW	Aluminum sheet, plate, and foil manufacturing, nsk, for nonadministrative-record establishments .....	2002.. N 1997.. N	X X	X X	35 908 —
331315WYWY	Aluminum sheet, plate, and foil manufacturing, nsk, for administrative-record establishments .....	2002.. N 1997.. N	X X	X X	45 445 —

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p—10 to 19 percent estimated; q—20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.



**Table 6b. Product Class Shipments for Selected States: 2002 and 1997**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3313151	Aluminum plate (thickness of 0.25 in. or more), including continuous cast	
	United States..... 2002..	589 429
	..... 1997..	923 131
3313153	Aluminum sheet and strip, including continuous cast	
	United States..... 2002..	8 402 531
	..... 1997..	10 514 924
	Illinois..... 2002..	230 836
	..... 1997..	258 235
	Kentucky..... 2002..	811 567
	..... 1997..	N
	West Virginia..... 2002..	615 425
	..... 1997..	747 354
3313155	Plain aluminum foil (less than .006 in. thick)	
	United States..... 2002..	788 518
	..... 1997..	1 044 976
3313157	Aluminum welded tube	
	United States..... 2002..	106 195
	..... 1997..	N

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

**Table 7. Materials Consumed by Kind: 2002 and 1997**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
331315	Aluminum sheet, plate, and foil manufacturing		
00900001	Total materials .....2002..	X	7 071 317
	.....1997..	X	9 270 465
33131205	Unalloyed aluminum and aluminum-base alloy ingot, pig, and shot .....1,000 s tons..2002..	S	1 409 541
	.....1997..	2 026.8	2 840 312
33131207	Alloyed aluminum and aluminum-base alloy ingot, pig, and shot .....1,000 s tons..2002..	P1 097.9	1 462 640
	.....1997..	1 489.7	1 566 026
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing ..... mil lb..2002..	P1 952.8	1 424 582
	.....1997..	2 152.1	1 587 266
33131600	Aluminum and aluminum-base alloy extruded shapes (including extruded rod, bar, pipe, tube, etc.) ..... mil lb..2002..	D	D
	.....1997..	D	D
33100011	All other aluminum and aluminum-base alloy shapes and forms (excluding castings, forgings, ingot, pig shot, sheet, plate, foil, welded tubing, extruded shapes, and fabricated metal) .....2002..	X	307 799
	.....1997..	X	190 651
33141935	Magnesium and magnesium-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....1,000 s tons..2002..	S	42 135
	.....1997..	47.8	142 273
33141905	All other nonferrous shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	20 400
	.....1997..	X	N
00190021	Aluminum and aluminum-base alloy scrap (excluding home scrap) from other establishments of your company .....1,000 s tons..2002..	Q404.2	428 982
	.....1997..	1 353.7	920 059
00190022	Aluminum and aluminum-base alloy scrap (excluding home scrap) from all other sources .....1,000 s tons..2002..	S	658 350
	.....1997..	629.3	661 748
33141105	Copper and copper-base alloy refinery shapes (excluding castings, forgings, and fabricated metal products) .....1,000 s tons..2002..	Q.9	1 473
	.....1997..	N	N
33120001	Steel shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	D
	.....1997..	X	N
00190080	Other nonferrous metal scrap (excluding home scrap) .....1,000 s tons..2002..	D	D
	.....1997..	D	D
32220017	Paper and paperboard containers (including shipping sacks and other paper packaging supplies) .....2002..	X	76 310
	.....1997..	X	N
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	1 083 630
	.....1997..	X	1 119 679
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	35 908
	.....1997..	X	—

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.